

# Chile

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75% of the population remains unelectrified

## Chile Renewable Energy Program

- Chile's Comisión Nacional de Energía (CNE) and others evaluating the applicability of renewables technology for rural and remote energy needs
- Pilot hybrid power systems in the IX, X, and XII Regions to demonstrate the use of renewables technology
- Consideration given to the use of renewables technology in many areas and applications of energy development
- Training of integrators, engineers, planners, and utility representatives in the design, operation, and maintenance of hybrid power systems
- Global Environment Facility Grant to support renewable energy development obtained

## Aqua Fresca Rural Boarding School

- The Universidad de Magallanes of Punta Arenas with support from the National Renewable Energy Laboratory (NREL) and the British government
- Provides 24-hour power for night and classroom lighting, security and entertainment to a rural boarding school for about 60 grade-school children
- Installed in spring 2000
- Community of Aqua Fresca, 30 km south of Punta Arenas
- Installed by the university with equipment funding from the university, the British government, and NREL
- Technical and system monitoring assistance by NREL



Rural School of Aqua Fresca provided 24-hour power using wind energy



Island community of Tac located in the Gulf of Ancud, Chile

## Isla Tac Community Power System

- CNE, Intendencia de los Lagos (Region X), NREL, the National Rural Electric Cooperative Association (NRECA), Saesa, and Wireless Energy
- Wind-hybrid power system to provide energy to 71 families of the Chiloe Island community of Tac to demonstrate wind renewable power systems for the electrification of island communities
- Installed spring 2000, dedicated by President Lagos in October 2000
- Located in the Gulf of Ancud, Region X of southern Chile
- US\$250,000 for the power and distribution systems funded jointly between all project partners

## Chiloe Rural Islands Electrification Project

- CNE, Intendencia de los Lagos (Region X), NREL, NRECA, and the Chilean federal government
- Electrification of 30 islands in the Chiloe Sound using a mix of wind hybrid and individual home wind systems
- Implementation in 2001 and 2002
- Islands located throughout the Gulf of Ancud in Region X
- Public request for proposal to provide electrical service issued by the regional government with technical assistance provided by CNE, NREL, and NRECA
- Over US\$12 million in power system equipment planned



Map indicating the islands of of Region X and the favorable wind resource available in the area